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CLAIMS

1. A vehicle braking assembly for a wheel which comprises a braking member arranged to move relative to the main body of the wheel between an inoperative and
5 an operative position, blocking means adapted to prevent the braking member from moving to an operative position and trigger means adapted to activate the braking member to move to an operative position wherein the trigger means is operable by a coded message passed by a separate transmitter as electromagnetic radiation and the assembly is provided with an EMR sensor and the blocking means is arranged to
10 reset the braking member to an inoperative position without manual interference.
2. A vehicle braking assembly device according to Claim 1 characterised in that the brake foot is the same or similar to that described in European Patent No. 1 101 685.
- 15 3. A vehicle braking assembly device according to Claim 1 characterised in that the wheel is provided with a circumferential brake guide.
4. A vehicle braking assembly device according to Claim 3 characterised in that
20 the circumferential brake guide is in the form of a slot or groove.
5. A vehicle braking assembly device according to Claim 3 characterised in that the brake guide is provided on only a portion of the circumference of the wheel.
- 25 6. A vehicle braking assembly device according to Claim 3 characterised in that the circumferential brake guide is formed by the mating of a pair of facing wheel members.
7. A vehicle braking assembly device according to Claim 3 characterised in that
30 each of the wheel member comprise a wheel and a wheel body, the diameter of the wheel body being less than the diameter of the wheel.

8. A vehicle braking assembly device according to Claim 7 characterised in that the braking assembly is provided on a wheel assembly which comprises a wheel supported in a fork and fixed using an axle fastening means.

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9. A vehicle braking assembly device according to Claim 1 characterised in that the wheel is provided with a peripheral brake foot.

10. A vehicle braking assembly device according to Claim 1 characterised in that an EMR sensor is positioned in a well exposed position towards the upper part of the wheel assembly in its normal "in use" position.

11. A vehicle braking assembly device according to Claim 1 characterised in that the trigger mechanism includes a latch which is operably linked to the sensor.

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12. A vehicle braking assembly device according to Claim 1 characterised in that the electromagnetic radiation (EMR) is used to trigger and/or reset the braking assembly.

20 13. A vehicle braking assembly device according to Claim 1 characterised in that the EMR is selected from radio waves and light waves, e.g. infra red light, visible light, or UV light or any combination thereof.

25 14. A vehicle braking assembly device according to Claim 13 characterised in that the EMR is infra red light.

15. A vehicle braking assembly for a wheel which comprises a braking member arranged to move relative to the main body of the wheel between an inoperative and an operative position, blocking means adapted to prevent the braking member from moving to an operative position and trigger means adapted to activate the braking member to move to an operative position characterised in that the trigger means

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comprises a latch which is adapted to engage with a toothed portion of the body of the wheel.

16 A vehicle braking assembly according to Claims 1 or 15 characterised in that
5 the wheel comprises a braking member arranged to move relative to the main body of the wheel between an inoperative and an operative position, blocking means adapted to prevent the braking member from moving to an operative position and trigger means adapted to activate the braking member to move to an operative position characterised in that the trigger means comprises a latch which is adapted to engage
10 with a toothed portion of the body of the wheel.

17. A vehicle braking assembly device according to Claim 16 characterised in that an inner portion of the wheel comprises recessed toothed region, positioned such that when the trigger is activated the latch engages with a tooth.

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18. A vehicle braking assembly device according to Claim 17 characterised in that when the brake is in the inoperable position, the latch is closed and the wheel and the recessed toothed portion of the wheel freely rotates and when the trigger is activated the latch engages with a toothed region of the recessed portion of the wheel
20 which acts to move the brake from an inoperable position to an operable position.

19 A vehicle braking assembly device according to Claim 18 characterised in that the latch is adapted to operate in a radial direction and the toothed portion of the wheel comprises a substantially circumferential recess.

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20. A vehicle braking assembly device according to Claim 19 characterised in that the wheel is provided with a plurality of toothed recesses.

21. A vehicle braking assembly device according to Claim 16 characterised in
30 that the blocking means comprises a resilient biasing member which is adapted to urge the braking member into the inoperable position.

22. A vehicle braking assembly device according to Claim 21 characterised in that the biasing member comprises a resilient spring.

5 23. A vehicle braking assembly device according to Claim 22 characterised in that the spring is situated adjacent or around the axle of the wheel assembly.

24. A vehicle braking assembly device according to Claim 23 characterised in that the wheel assembly may be provided with an axial housing for resilient spring.

10 25. A vehicle braking assembly device according to Claims 1 or 15 characterised in that the braking mechanism is adapted to be automatically reset.

26. A vehicle braking assembly device according to Claim 25 characterised in that a second EMR source is provided which acts as a resetting beam,

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27. A vehicle braking assembly device according to Claim 27 characterised in that the second EMR source triggers the solenoid, motor and/or bellows to revert to its rest position.

20 28. A vehicle braking assembly device according to Claim 1 characterised in that the EMR source is operably linked to an EMS tagging security system.

29. A vehicle braking assembly device according to Claim 15 characterised in that the latch is preferably operated by a solenoid or motor.

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30. A vehicle braking assembly device according to Claim 29 characterised in that the solenoid or motor is operably linked to a bellows.

31. A vehicle braking assembly device according to Claim 29 characterised in
30 that the solenoid is provided with a support power supply.

32. A vehicle braking assembly device according to Claim 31 characterised in that the support power supply is in the form of a solid state battery.

33. A vehicle braking assembly device according to Claim 29 characterised in
5 that the solenoid is operably linked to a programmable integrated chip.

34. A vehicle braking assembly device according to Claim 1 characterised in that the wheel assembly is adapted to act as a generator.

10 35. A vehicle braking assembly device according to 31 characterised in that the generator is provided adapted to recharge the support power supply.

36. A vehicle wheel assembly adapted to act as a power generator comprises a fixed body member and a rotatably mounted wheel member characterised in that one
15 of the body member and the wheel member is provided with a stator and the other member is provided with a plurality of permanent magnets which are of alternating polarity.

37. A vehicle wheel assembly according to Claim 36 characterised in that one of
20 a wheel member and a wheel body member is provided with a stator and the other member is provided with a plurality of permanent magnets which are of alternating polarity.

38. A vehicle wheel assembly according to Claim 36 or 37 characterised in that
25 the body member is provided with a stator and the wheel member is provided with a plurality of permanent magnets.

39. A vehicle braking assembly or wheel assembly substantially as described with
reference to the accompanying drawings and examples.
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